

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-28 (Canceled).

Claim 29 (New): A liquid crystal display method to display an image according to an image signal, comprising:

changing a ratio of a display period and a non-display period of said image according to said image signal;

detecting a maximum brightness level of said image signal in 1 frame; and

changing the ratio of the display period and the non-display period of said image in a 1 frame period according to said detected maximum brightness level.

Claim 30 (New): The liquid crystal display method according to claim 29, wherein said changing the ratio of the display period and the non-display period of said image in said 1 frame period includes changing a ratio of a lightening period and a no-lightening period of a light providing part, which lights a liquid crystal panel from a back side thereof.

Claim 31 (New): The liquid crystal display method according to claim 29, wherein said changing the ratio of the display period and the non-display period of said image in said 1 frame period includes changing a transmittance or a no-transmittance of a shutter element provided on a light providing part or on a front side of a liquid crystal panel.

Claim 32 (New): The liquid crystal display method according to claim 29, wherein

said changing the ratio of the display period and the non-display period of said image in said 1 frame period includes changing a ratio of a period when the image display signal, which corresponds to said image signal, is supplied and a period when a black display signal is supplied to a liquid crystal panel.

Claim 33 (New): The liquid crystal display method according to claim 29, further comprising:

deciding whether a frame image is a motion image or a still image based on the image signal and a synchronizing signal; and

changing the ratio of the display period and the no-display period of said image based on said decision result.

Claim 34 (New): The liquid crystal display method according to claim 29, wherein said changing the ratio of the display period and the no-display period of said image includes supplying said image signal of the 1 frame to a plurality of areas of a liquid crystal display device and changing the ratio of the display period and the no-display period of each of the plurality of areas of the liquid crystal display device.

Claim 35 (New): The liquid crystal display method according to claim 29, wherein said detecting a maximum brightness level of said image signal includes supplying said image signal of the 1 frame to a plurality of areas of a liquid crystal display device and detecting a maximum brightness level of said image signal in each of said plurality of areas of the liquid crystal display device.

Claim 36 (New): The liquid crystal display method according to claim 29, wherein a liquid crystal display device has a scanning line, a signal line, and a plurality of pixels, formed at an intersection of the signal line with the scanning line, are arranged in a matrix,

said plurality of pixels having a first pixel which changes the transmitting light according to an image signal of a first polarity and shields a light based on an image signal of a second polarity and a second pixel which changes the transmitting light according to the image signal of the second polarity and shields a light based on the image signal of the first polarity,

either one of said first pixel and said second pixel is arranged along a direction of said scanning line,

said first pixel and said second pixel alternately are arranged along said signal line, and

the image is written by applying the image signal of said first polarity to said first pixel, and applying the image signal of said second polarity to said second pixel.

Claim 37 (New): The liquid crystal display method according to claim 36, wherein one of the image signal of said first polarity and the image signal of said second polarity is applied to said first pixel and said second pixel connected to said signal line at the same time.

Claim 38 (New): The liquid crystal display method according to claim 37, wherein the image signal of said first polarity is a writing signal of said first pixel and an erase signal of said second pixel; and

the image signal of said second polarity is an erase signal of said first pixel and a writing signal of the second said pixel.

Claim 39 (New): The liquid crystal display method according to claim 29, further comprising:

changing a gray-scale of said image signal in said 1 frame based on said ratio of the display period and the non-display period of said image in said 1 frame period according to said image signal.

Claim 40 (New): The liquid crystal display method according to claim 39, wherein said changing the ratio of the display period and the non-display period of said image in said 1 frame period includes changing a ratio of a lightening period and a no-lightening period of a light providing part, which lights a liquid crystal panel from a back side thereof.

Claim 41 (New): The liquid crystal display method according to claim 39, wherein said changing the ratio of the display period and the non-display period of said image in said 1 frame period includes changing a transmittance or a no-transmittance of a shutter element provided on a light providing part or on a front side of a liquid crystal panel.

Claim 42 (New): The liquid crystal display method according to claim 39, wherein said changing the ratio of the display period and the non-display period of said image in said 1 frame period includes changing a ratio of a period when the image display signal, which corresponds to said image signal, is supplied and a period when a black display signal is supplied to a liquid crystal panel.

Claim 43 (New): The liquid crystal display method according to claim 29, wherein said changing the ratio of the display period and the non-display period of said image in said 1 frame period includes enlarging the ratio of the display period when the maximum brightness level becomes large.

Claim 44 (New): The liquid crystal display method according to claim 39, wherein said changing the gray-scale of said image signal includes changing the gray-scale by the following formula:

$$L_{out} = L / (D / D_{max})^{1/\gamma}$$

where, L_{out} : gray-scale after change,

L : gray-scale before change,

γ : gamma characteristic of image signal, and

$D = (\text{display period}) / (1 \text{ frame period})$.

Claim 45 (New): A method to display an image on a liquid crystal display according to an image signal, the liquid crystal display having a signal line driving circuit configured to supply the image signal and a black signal to a signal line, the method comprising:

changing a ratio of a display period and a non-display period of said image according to said image signal, wherein

said changing the ratio of the display period and the non-display period of said image includes:

a first step of supplying the image signal via the signal line to a pixel on a s-th horizontal line of the liquid crystal display for a first half of a horizontal scanning period; and

a second step of supplying the black signal via the signal line to a pixel on a t-th horizontal line of the liquid crystal display for the rest of the horizontal scanning period, wherein the first step and the second step are repeated alternately for 1 frame period while changing the values of s and t.

Claim 46 (New): The liquid crystal display method according to claim 45, wherein said signal line driving circuit supplies said image signal for p gray-scales (p is an integer of two or more),

said image signal is an image signal to display the image for p gray-scales, respectively,

a multi gray-scale display for 2p gray-scales display is performed over the 1 frame period when a still image is displayed, and

a high refreshing rate display is used to display the image with a time difference when a motion image is displayed.

Claim 47 (New): The liquid crystal display method according to claim 45, wherein said image signal and black signal are supplied to said signal line continuously, periodically and repeatedly.

Claim 48 (New): The liquid crystal display method according to claim 47, wherein said signal line driving circuit supplies said image signal for p gray-scales (p is an integer of two or more),

said image signal is an image signal to display the image for p gray-scales, respectively,

a multi gray-scale display for $2p$ gray-scales display is performed over the 1 frame period when a still image is displayed, and

a high refreshing rate display is used to display the image with a time difference when a motion image is displayed.

Claim 49 (New): The liquid crystal display method according to claim 47, wherein said image signal is an image signal to display the image, and said black signal is a reset signal.

Claim 50 (New): The liquid crystal display method according to claim 49, wherein said signal line driving circuit supplies said image signal for p gray-scales (p is an integer of two or more),

said image signal is an image signal to display the image for p gray-scales, respectively,

a multi gray-scale display for $2p$ gray-scales display is performed over the 1 frame period when a still image is displayed, and

a high refreshing rate display is used to display the image with a time difference when a motion image is displayed.

Claim 51 (New): The liquid crystal display method according to claim 47, wherein said image signal is an image signal to display the image, and said black signal is a black display signal.

Claim 52 (New): The liquid crystal display method according to claim 47, wherein

said image signal is an image signal to display the image and said black signal is a gray-scale offset signal.